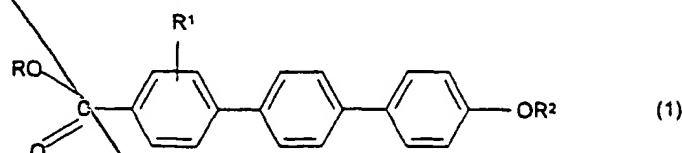


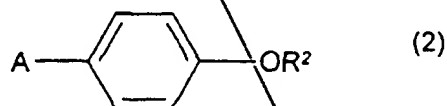
## Abstract

## Method for producing [1,1':4',1'']-terphenyl compounds

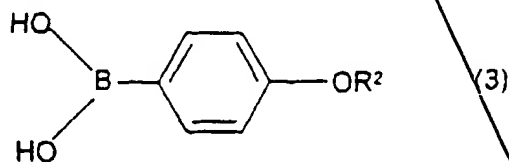
- 5 The invention relates to a method for producing [1,1':4',1'']-terphenyl compounds of the formula



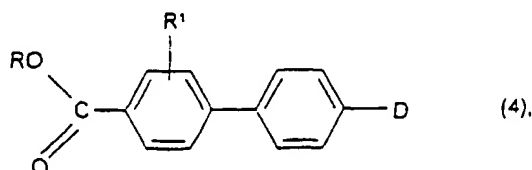
- in which R is hydrogen or a C<sub>1</sub>-C<sub>4</sub>-alkyl radical, R<sup>1</sup> is hydrogen, a C<sub>1</sub>-C<sub>4</sub>-alkyl radical or a C<sub>1</sub>-C<sub>4</sub>-alkoxy radical and R<sup>2</sup> is hydrogen, a straight-chain C<sub>1</sub>-C<sub>12</sub>-alkyl radical, an unsubstituted phenyl radical, a phenyl radical which is substituted by one or two C<sub>1</sub>-C<sub>4</sub>-alkyl groups or C<sub>1</sub>-C<sub>4</sub>-alkoxy groups, or a radical -(CH<sub>2</sub>)<sub>x</sub>OR<sup>3</sup> in which x is from 1 to 4 and R<sup>3</sup> is a C<sub>1</sub>-C<sub>4</sub>-alkyl radical, which comprises reacting a metal aryl of the formula



- 15 in which A is a monovalent metal or MeX, where Me is a divalent metal and X is Cl, Br or I, and R<sup>2</sup> is A or a trisubstituted silyl radical, or has the meaning indicated in formula (1), excepting hydrogen, with a boric ester at -80 to 40°C in the presence of an inert solvent, converting the reaction product by hydrolysis into a boronic acid of the formula



- 25 reacting the boronic acid, a boronic anhydride obtainable from boronic acid by elimination of water, or a mixture of boronic acid and boronic anhydride, with an alcohol, and reacting the boronic ester formed thereby with a biphenyl compound of the formula



in which D is Cl, Br, I,  $\text{O}_3\text{S-C}_n\text{F}_{2n+1}$  or  $\text{N}_2^+\text{Y}^-$  where  $\text{Y}^-$  is  $\text{ClO}_4^-$ ,  $\text{BF}_4^-$  or  $\text{HSO}_4^-$ , at 40 to 180°C in the presence of a catalyst, of an acid-binding agent and of a polar solvent.